# INLAND WETLANDS AND WATERCOURSES REGULATIONS OF THE TOWN OF BRANFORD

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# INLAND WETLANDS AND WATERCOURSES REGULATIONS OF THE TOWN OF BRANFORD CONNECTICUT

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# INLAND WETLANDS AND WATERCOURSES REGULATIONS

# OF THE

# TOWN OF BRANFORD

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# APPENDIX

- A. Inland Wetland Commissioners and Staff-Credentials and Experience (Added March 2009)
- B. Commission and staff Ciriculum Vitae (Added March 2009)

#### TITLE AND AUTHORITY

1.1 The inland wetlands and watercourses of the State of Connecticut are an indispensable, fragile and irreplaceable natural resource with which the citizens of the State have been endowed. The wetlands and watercourses are an interrelated web of nature essential for an adequate supply of surface and ground water; for hydrological stability and control of flooding and erosion; for the recharging and purification of groundwater; and for the existence of many forms of animal, aquatic and plant life.

Many inland wetlands and watercourses have been destroyed or are in danger of being destroyed because of unregulated use by reason of the deposition, filling or removal of material, the diversion or obstruction of water flow, the erection of structures, and other uses, all of which have despoiled, polluted and eliminated wetlands and watercourses. Such unregulated activity has had, and will continue to have, a significantly adverse impact on the environment and ecology of the State of Connecticut, and has and will continue to imperil the quality of the environment, thus adversely affecting the ecological, scenic, historic and recreational values and benefits of the State for its citizens now and forever more.

The preservation and protection of the wetlands and watercourses from random, unnecessary, undesirable and unregulated uses, and from disturbances or destruction is in the public interest and is essential to the health, welfare and safety of the citizens of the State.

In furtherance of the foregoing goals the Town of Branford Inland Wetland Commission hereby adopts a "no net loss policy for all wetlands and watercourses". In furtherance of the no net loss policy the Agency may require wetland mitigation which may include the following:

- a. Avoidance, by evaluating alternative development designs and sites.
- b. Minimization, by implementing special design features and construction practices so that impacts to wetlands can be minimized.
- c. Compensation by offsetting remaining wetland losses.

It is, therefore, the purpose of these regulations to protect the citizens of the State by making provisions for the protection, preservation, maintenance and use of the wetlands and watercourses by minimizing their disturbance and pollution; by maintaining and improving water quality in accordance with the highest standards set by federal, state or local authority; by preventing damage from erosion, turbidity or siltation; by preventing the loss of fish (and other beneficial aquatic organisms), wildlife, and vegetation and the destruction of the natural habitats thereof; by deterring and inhibiting the danger of flood and pollution; by protecting the quality of wetlands and watercourses for their conservation, and the economic, aesthetic, recreational and other public and private uses and values; and by protecting the State's potable fresh water supplies from the dangers of drought, overdraft, pollution, misuse and mismanagement by providing an orderly process to balance the need for the economic growth of the State and the use of its land with the need to protect its environment and ecology in order to forever guarantee to the people of the State, the safety of such natural resources for their benefit and enjoyment and for the benefit of generations yet unborn.

1.2 These regulations shall be known as the "Inland Wetlands and Watercourses Regulations of the Town of Branford."

- 1.3 The Branford Inland Wetands Commission was established in accordance with an ordinance adopted January 16, 1974, and shall implement the purposes and provisions of the Inland Wetlands and Watercourses Act in the Town of Branford.
- 1.4 These regulations have been adopted and may be amended, from time to time, in accordance with the provisions of the Inland Wetlands and Watercourses Act and these regulations.
- 1.5 The Agency shall enforce all provisions of the Inland Wetlands and Watercourses Act and shall per, CGS Section 22a-42a(d), grant a permit for an application as filed grant with other terms, conditions, limitations or modifications of the regulated activity, or deny a permit for regulated activities proposed with in the Town of Branford to carry out the policies of Sections 22a-36 to 22a-45, inclusive, of the Connecticut General Statutes, as amended.

#### **DEFINITIONS**

# 2.1 As used in these regulations:

- a. "Act" means the Inland Wetlands and Watercourses Act, sections 22a-36 through 22a-45 of the Connecticut General Statutes, as amended.
- b. "Agency" means the Inland Wetlands Commission of the Town of Branford or its designated agent.
- c. "Best Management Practices" (BMPs), or Management Practices means structures and procedures designed to minimize the impacts of development on wetlands and watercourses. Such management practices include, but are not limited to; erosion and sedimentation controls; restrictions on land use and development; construction setbacks from wetlands or watercourses; proper disposal of waste materials; procedures for equipment maintenance to prevent fuel spillage; construction methods to prevent flooding or disturbance of wetlands or watercourses; procedures for maintaining continuous stream flows; confining construction that must take place in water courses to times when water flows are low and fish and wildlife will not be adversely affected.
- d. "Bogs" means areas usually distinguished by poor drainage, highly acidic conditions, a layer of mosses, evergreen trees and shrubs underlain by peat deposits.
- e. "Clear-cutting" means the harvest of timber in a fashion which removes all species of trees down to a 2 inch diameter at breast height.
- f. "Clearing" means removal of vegetation including but not limited to woody species less than 2" in diameter
- g. "Commission" means the Inland Wetlands Commission of the Town of Branford.
- h. "Commission member" means a member of Inland Wetlands Commission of the Town of Branford.
- i. "Commissioner of Environmental Protection" means the Commissioner of the State of Connecticut Department of Environmental Protection.
- j. "Compensation" means the restoration, creation, enhancement, and/or preservation of wetlands and/or other aquatic resources to mitigate for unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved.
- k. "Continual flow" means a flow of water which persists for an extended period of time: this flow may be interrupted by periods of drought or during the low flow period of the annual hydrological cycle, June through September, but it recurs in prolonged succession.

- 1. "Creation" means the establishment of a wetland or other aquatic resource where one did not formerly exist.
- m. "Deposit" includes but shall not be limited to, fill, grade, dump, place, discharge or emit.
- n. "Duly Authorized Agent" means an individual designated by the Commission to carry out certain functions and purposes provided such agent has completed the comprehensive training program developed by the commissioner pursuant to CGS Section 22a-39(n).
- o. "Discharge" means the emission of any water, substance, or material into waters of the Town of Branford, whether or not such substance causes pollution.
- p. "Disturbing the natural and indigenous character of the land" means the activity will significantly disturb an inland wetland or watercourse by reason of removal or deposition of material, clear-cutting, alteration or obstruction of water flow, or will result in the pollution of the wetland or watercourse.
- q. "Enhancement" means an activity conducted in an existing wetland and/or other aquatic resource which increase or create one or more aquatic functions.
- r. "Environmental function" means any function the wetland serves including but not limited to flood storage, wildlife and plant utilization, ability to filter and recharge surface and ground water systems and refuge for migratory and local wildlife populations
- s. "Essential to the farming operation" means the activity proposed is necessary and indispensable to sustain farming activities on the farm.
- t. "Farming" includes agriculture, forestry, and aquaculture as defined by CGS Section 1-1(q) and as determined by ruling of the Agency.
- u. "Feasible" means able to be constructed or implemented consistent with sound engineering principles
- v. "Habitats" means areas or environments in which an organism or biological population normally occurs.
- w. "Intermittent watercourse" see definition under "Watercourses".
- x. "License" means the whole or any part of any permit, certificate of approval or similar form of permission which may be required by any person by the provisions of these regulations under authority of the Agency.
- y. "Like habitat" means a wetland with at least the same environmental function as the area impacted by regulated activity.
- z. "Marshes" means areas with soils exhibiting aquic moisture regimes, distinguished by the absence of trees and shrubs, and the dominance of soft-stemmed herbaceous plants. The water table in marshes is typically at or above the ground surface throughout the year and areas of open water six inches or more in depth are common, but seasonal water table fluctuations are encountered
- aa. "Material" means any substance, solid or liquid, organic or inorganic, including, but not limited to vegetation, soil, sediment aggregate, land, gravel, clay, bog, peat, mud, debris, sand, refuse or waste.
- bb. Municipality" means the Town of Branford, New Haven County, Connecticut.
- cc. "Nursery" means land used for propagating trees, shrubs or other plants for transplanting, sale, or use as stock for grafting.
- dd. "Permit" means the whole or any part of a license, certificate of approval or similar form of permission which may be required of any person by the provisions of these regulations under the authority of the Agency.
- ee. "Permittee" means the individual to whom such permit has been issued.
- ff. "Person" means any individual, firm, partnership, association, corporation, company, organization or legal entity of any kind, including municipal corporations, governmental agencies or subdivisions thereof.

- gg. "Pollution" means the harmful thermal effect or the contamination or rendering unclean or impure of any waters of the Town of Branford by reason of any waste or other materials discharged or deposited therein by any public or private sewer or otherwise so as to directly or indirectly come in contact with any waters. Pollution includes but is not limited to, erosion and sedimentation resulting from any filling, land clearing or excavation activity.
- hh."Preservation" means the long-term protection of wetlands or other aquatic resource and associated uplands through the implementation of legal and physical mechanisms.
- ii. "Prudent" means economically and otherwise reasonable in light of the social benefits to be derived from the proposed regulated activity provided cost may be considered in deciding what is prudent and further provided a mere showing of expense will not necessarily mean an alternative is imprudent.
- jj. "Re-creation" means the re-establishment of a wetland and / or other aquatic resource where one formerly existed.
- kk."Reclamation" means conversion of wetland into dryer land suitable for cultivation or other use by means including but not limited to draining, altering of water hydrology that supports the wetland, or filling
- 11. "Regulated activity" means any operation within or use of a wetland or watercourse involving removal or deposition of material, or any obstruction, construction, alteration or pollution of such a wetland or watercourse, but shall not include the activities specified in section 4 of these regulations. Furthermore:
  - 1.) Any clearing, grubbing, filling, grading, paving, excavating, constructing, depositing or removing of material, cutting of vegetation (living or dead), or discharging of storm water on land within 100 feet measured horizontally from the boundary of any wetland or watercourse is a regulated activity.
  - 2.) The Agency may rule that any activity that alters the existing rate, or quality of any storm water discharge conveyed to a regulated area or upland review area is likely to impact or affect wetlands or watercourses and is a regulated activity.
  - 3.) The Agency may extend the upland review to the top of slope, if steep slopes or erodible soils are present.
  - 4.) The Agency may rule that any activity located within such upland review area or in any other non-wetland or non-watercourse area is likely to impact or affect wetlands or watercourses and is a regulated activity.
- mm. "Regulated area" means any wetland or watercourse as defined in these regulations.
- nn. "Remove" includes, is not be limited to, drain, excavate, mine, dig, dredge, suck, grub, clear cut timber, bulldoze, dragline or blast.
- oo. "Rendering unclean or impure" means any alteration of the physical, chemical or biological properties of any water of the Town of Branford, including but not limited to, change in odor, color, turbidity or taste.
- pp. "Restoration" means returning a degraded wetland and/or other aquatic resource closer to it's undegraded state.
- qq. "Significant activity" means any activity including, but not limited to, the following activities which may have a substantial effect on the area for which an application has been filed, or any other part of the wetland of watercourse system:
  - 1.) Any activity involving deposition or removal of material which may have a substantial effect on the regulated area or on another part of the inland wetland or watercourse system, or
  - 2.) Any activity which substantially changes the natural channel or may inhibit the natural dynamics of a watercourse system, or
  - 3.) Any activity which substantially diminishes the natural capacity of the inland wetland or watercourse to support fisheries, wildlife, or other biological life, prevent flooding, supply

- water, assimilate waste, facilitate drainage, provide recreation open space or other functions, or
- 4.) Any activity which causes substantial turbidity, siltation, or sedimentation in a wetland or watercourse, or
- 5.) Any activity which causes a substantial diminution of flow of a natural watercourse, or groundwater levels of the regulated area, or
- 6.) Any activity which causes or has the potential to cause pollution of a wetland or watercourse, or
- 7.) Any activity which creates conditions of an inland wetland or watercourse which may adversely affect the health, welfare, and safety of any individual of the community, or
- 8.) Any activity which destroys unique wetland or watercourse areas having a demonstrable scientific, educational or ecological value,
- rr. "Soil Scientist" means an individual duly qualified in accordance with standards set by the Federal Office of Personnel Management
- ss. "Submerged lands" means those lands which are inundated by water on a seasonal or more frequent basis.
- tt. "Swamps" means areas with soils exhibiting aquic moisture regimes, dominated by wetland trees and shrubs.
- uu. "Town" means the Town of Branford, New Haven County in the State of Connecticut.
- vv. "Upland Review Area" means any area on which activities are likely to impact or affect wetlands or watercourses.
- ww."Vernal" means appearing or occurring in the spring.
- xx. "Waste" means sewage, or any natural or man-made substance (liquid, gaseous, solid or radioactive) which may pollute or tend to pollute any of the waters of the Town of Branford.
- yy. "Watercourses" means rivers, streams, brooks, waterways, lakes, ponds, marshes, swamps, bogs, and all other bodies of water, natural or artificial, vernal or intermittent, public or private, which are contained within, flow through or border upon the Town of Branford or any portion thereof not regulated pursuant to section 22a-28 through 22a-35a of the Connecticut General Statutes as amended. Intermittent watercourses shall be delineated by a defined permanent channel and bank and the occurrence of two or more of the following characteristics: (A) Evidence of scour or deposits of recent alluvium or detritus, (B) the presence of standing or flowing water for a duration longer than a particular storm incident, and (C) the presence of hydrophytic vegetation.
- zz. "Wetlands" means land, including submerged land not regulated pursuant to sections 22a-28 to 22a-35a of the Connecticut General Statutes as amended, which consist of any of the soil types designated as poorly drained, very poorly drained, alluvial and flood plain by the National Cooperative Soils Survey, as may be amended from time to time, of the National Resources Conservation Service of the U.S. Department of Agriculture.

#### INVENTORY OF REGULATED AREAS

3.1 The map of regulated areas, entitled "Inland Wetlands and Watercourses Map, Branford, Connecticut," delineates the general location and boundaries of inland wetlands and the general location of watercourses. Copies of this map are available for inspection in the office of the Town Clerk or the Inland Wetlands Agency. In all cases, the precise location of regulated areas shall be determined by the actual character of the land, the distribution of regulated soil types, and locations of watercourses. The Agency may use aerial photography, remote sensing imagery, resource

- mapping, global positioning systems, soils maps, site inspection observations or other information in determining the boundaries of the wetlands and watercourses.
- 3.2 Any property owner who disputes the designation of any part of his or her land as a regulated area on the Inland Wetlands and Watercourses Map, may petition the Commission to change the designation in accordance with section 15 of these regulations. Such map amendments applications are subject to the application requirements and public hearing process outlined in Section 15 of these regulations.
- 3.3 The Agency or its designated agent(s) shall maintain a current inventory of regulated areas within the town. The Agency may amend its map as more accurate information becomes available. Any person may petition for an amendment to the map. Petitioners shall bear the burden of proof for all requested map amendments. Such map amendment applications are subject to the application requirements and public hearing process outlined in section 15 of these regulations.

#### PERMITTED USES AS OF RIGHT & NON-REGULATED USES

- 4.1 The following operations and uses shall be permitted in inland wetlands and watercourses, as of right per CGS 22a-40(a). The Agency makes the determination as to whether a proposed activity meets the definition that it is as of right or is a regulated activity.
  - a. Grazing, farming, nurseries, gardening and harvesting of crops and creation of farm ponds of three acres or less essential to the farming operation, and activities conducted by, or under authority of, the Department of Environmental Protection for the purposes of wetland or watercourse restoration or enhancement or mosquito control. The provisions of this subsection shall not be construed to include:
    - 1.) road construction or the erection of buildings not directly related to the farming operation,
    - 2.) relocation of watercourses with continual flow.
    - 3.) filling or reclamation of wetlands,
    - 4.) filling or reclamation of watercourses with continual flow.
    - 5.) clear cutting of timber except for the expansion of agricultural crop land,
    - 6.) or the mining of top soil, peat, sand, gravel or similar material from wetlands or watercourses for the purposes of sale.
  - b. A residential home (i) for which a building permit has been issued or (ii) on a subdivision lot, provided the permit has been issued or the subdivision has been approved by a municipal planning, zoning or planning and zoning commission as of the effective date of promulgation of the municipal regulations pursuant to subsection (b) of section 22a-42a of Connecticut General Statutes, as amended, or as of July 1, 1974, whichever is earlier, and further provided no residential home shall be permitted as of right pursuant to this subsection unless the building permit was obtained on or before July 1, 1987. The individual claiming a use of wetlands permitted as a right under this subsection shall document the validity of said right by providing a certified copy of the building permit and a site plan showing proposed and existing topographic contours, house and well locations, septic system, driveway, approval dates or other necessary information to document his entitlement;
  - c. Boat anchorage or mooring, not to include dredging or dock construction;
  - d. Uses incidental to the enjoyment or maintenance of residential property, such property defined as equal to or smaller than the largest minimum residential lot size permitted anywhere in the municipality and containing a residence. Such incidental uses shall include maintenance of

- existing structures and landscaping, but shall not include removal or deposition of substantial amounts of material from or into a wetland or watercourse, or diversion or alteration of a watercourse;
- e. Construction and operation, by water companies as defined by section 16-1 of the Connecticut General Statutes as amended or by municipal waterworks systems as provided for in Chapter 102 sections 7-234 through 7-244a of the Connecticut General Statutes, as amended, of dams, reservoirs and other facilities necessary to the impounding, storage and withdrawal of water in connection with public water supplies except as provided in sections 22a-401 through 22a-415 of the Connecticut General Statutes as amended.
- f. Maintenance relating to any drainage pipe which existed before the effective date of any municipal regulations adopted pursuant to section 22a-42a or July 1, 1974, whichever is earlier, provided such pipe is on property which is zoned as residential but which does not contain hydrophytic vegetation. For the purposes of this subdivision, "maintenance" means the removal of accumulated leaves, soil, and other debris whether by hand or machine, while the pipe remains in place.
- 4.2 The following operations and uses shall be permitted as a non-regulated use in wetlands and watercourses, provided they do not disturb the natural and indigenous character of the wetland or watercourse by removal or deposition of material, alteration or obstruction of water flow or pollution of the wetland or watercourse per CGS 22a-40(b). The Agency makes the determination as to whether a proposed activity meets the definition that it is a non-regulated use or is a regulated activity:
  - a. Conservation of soil, vegetation, water, fish, shellfish, and wildlife. Such operation or use may include, but is not limited to, minor work to control erosion, or to encourage proper fish, wildlife and silviculture management practices.
  - b. Outdoor recreation including the use of play and sporting areas, golf courses, field trials, nature study, hiking, horseback riding, swimming, skin and scuba diving, camping, boating, water skiing, trapping, hunting, fishing and shell-fishing and cross-country skiing where otherwise legally permitted and regulated.
- 4.3 All activities in wetlands or watercourses involving filling, excavation, dredging, clearing of vegetation, clear cutting, grading, and excavation or any other alteration or use of a wetland or watercourse not specifically permitted by this section shall require a permit from the Commission in accordance with section 6 of these regulations.
- 4.4 To carry out the purposes of this section, any person proposing to carry out a permitted operation or non-regulated use of a wetland or watercourse which may disturb the natural and/or indigenous character of the land shall, prior to commencement of such operation or use, request a determination by the Agency on a form provided by it, and provide the Agency with sufficient information to enable it to properly determine that the proposed operation or use is a permitted or non-regulated use of the wetland or watercourse. The Agency shall rule that the proposed operation or use is permitted or non-regulated, or that a permit is required. Such ruling shall be in writing, with a copy retained by the Commission, and shall be made within 65 days after request is heard by the Commission.

#### ACTIVITIES REGULATED BY THE STATE

- 5.1 In addition to any permit or approval required by the Agency, the Commissioner of Environmental Protection shall regulate activities in or affecting wetlands or watercourses subject to the following jurisdiction:
  - a. Construction or placement of any obstruction within stream channel encroachment lines pursuant to sections 22a-342 through 22a-349 of the Connecticut General Statutes, as amended;
  - b. Construction or placement of any structure or obstruction within the tidal, coastal or navigable waters of the State pursuant to sections 22a-359 through 22a-363 or in designated tidal wetlands pursuant to sections 22a-28 through 22a-35 of the Connecticut General Statutes, as amended;
  - c. Diversion of water in excess of fifty thousand (50,000) gallons per day or any surface waters of the State where the tributary watershed area above the point of diversion is 100 acres or larger pursuant to sections 22a-365 through 22a-378 of the Connecticut General Statutes, as amended;
  - d. Discharges into the waters of the State pursuant to section 22a-430 of the Connecticut General Statutes, as amended.
  - e. Discharge of fill or dredged materials into the wetlands and watercourses of the State pursuant to section 401 of the Federal Clean Water Act, as amended, for activities regulated by the U.S. Army Corps of Engineers under section 404 of the Federal Clean Water Act as amended.
- 5.2 The Commissioner of Environmental Protection shall have exclusive jurisdiction over regulated activities and other activities, in or affecting wetlands or watercourses, undertaken by any department, agency or instrumentality of the State of Connecticut, except any local or regional board of education, (1) after an advisory decision on such license or permit has been rendered to the Commissioner by the wetland agency of the municipality within which such wetland is located, or (2) thirty-five days after receipt by the Commissioner of such application, whichever occurs first.
- 5.3 The Commissioner of Environmental Protection shall have exclusive jurisdiction over tidal wetlands designated and regulated pursuant to sections 22a-28 through 22a-35 of the Connecticut General Statutes as amended.
- 5.4 The Commissoner of Environmental Protection shall have exclusive jurisdiction over activities authorized under a dam repair or removal order issued by the Commissioner of Environmental Protection under section 22a-402 or a dam construction permit issued by the Commissioner of Environmental Protection under sections 22a-403 or 22a-411 of the Connecticut General Statutes, as amended. Any person receiving such dam repair permit or removal order or dam construction permit shall not be required to obtain a permit from a municipal wetlands agency for any action necessary to comply with said dam order or to carry out the activities by said dam permit.

#### REGULATED ACTIVITIES TO BE LICENSED

- 6.1 No person shall conduct or maintain a regulated activity without first obtaining a permit for such activity from the Inland Wetlands Commission of the Town of Branford.
- 6.2 The Agency shall regulate any operation within or use of a wetland or watercourse involving removal or deposition of material, or any obstruction, construction, alteration or pollution, of such wetlands or watercourses and any other regulated activity, unless such operation or use is permitted as of right or non-regulated pursuant to section 4 of these regulations.
- 6.3 Any person found to be conducting or maintaining a regulated activity without the prior authorization of the Inland Wetlands Commission, or violating any other provision of these regulations, shall be subject to the enforcement proceedings and penalties prescribed in section 14 of these regulations and any other remedies as provided by law.

#### **SECTION 7**

#### APPLICATION REQUIREMENTS

- 7.1 Any person wishing to undertake a regulated activity shall apply for a permit on a form entitled "Branford Inland Wetlands Commission Application for Permit." An application shall include an application form and such information as prescribed by subsection 7.4 and, in the case of a significant activity, such information as prescribed by section 7.5 of these regulations. Application forms may be obtained in the offices of the Inland Wetlands Agency.
- 7.2 All applications shall contain such information that is necessary for a fair and informed determination of the issues.
- 7.3 The Agency and the applicant may hold a pre-application meeting.
- 7.4 All applications shall include the following information in writing, or on maps or drawings:
  - a. The applicant's name, home and business addresses and telephone numbers;
  - b. The owner's name, address and telephone number and written consent of all the landowner(s) if the applicant is not the owner of the property involved in the application;
  - c. Certification that the applicant is familiar with all the information provided in the application and is aware of the penalties for obtaining a permit through deception or through inaccurate or misleading information.
  - d. The geographical location of the property which is to be affected by the proposed activity,
  - e. A computation of the area(s) of wetland or watercourse disturbance, upland review area disturbance, total are of disturbance, areas of compensation, percentage of impervious cover;
  - f. A narrative describing the proposed activity, any impacts to regulated areas which may occur, are reasonably related to, or are made inevitable by the proposed regulated activity, proposed erosion and sedimentation controls and other management practices (best management practices) which would mitigate impacts from the proposed regulated activity(ies) including, but not limited to, measures to (1) prevent or minimize pollution or other environmental damage, (2) maintain or

- enhance existing environmental quality, or (3) compensation (Section 11.12) in the following order of priority: restore, enhance and create productive wetland or watercourse resources (Section 7.6);
- g. Original soils report signed by the soil scientist if applicable
- h. Alternatives considered by the applicant and why the alternatives were rejected in favor of the regulated activities proposed in the application. The applicant shall be prepared to discuss alternatives at the hearing. The Commission reserves the right to ask for diagrams and a written narrative of alternative plans with the application;
- i. Plan set as deemed necessary by the Agency, drawn, signed, and sealed by a licensed surveyor or professional engineer meeting the accuracy of an A-2 survey, or by a landscape architect registered in the State of Connecticut or by such other qualified person acceptable to the Agency, to include but not limited to the following:
  - 1. Existing conditions identifying complete legend, site location, all existing features including but not limited to boundaries of land ownership, adjacent property owners, existing topography (2 foot contours), existing structures, delineated wetlands, watercourses, and upland review area boundaries, and approximate wetlands and watercourses on adjacent properties within 100 feet of the existing property boundary. Also to include areas where contamination has been identified.
  - 2. <u>Proposed conditions</u> to include existing conditions and proposed site conditions including but not limited to identification of proposed regulated activities in relation to wetlands, watercourses, and their watersheds, and any impacts to the regulated areas which may occur, proposed limits of disturbance, clearing or cutting of vegetation, blasting, excavation, filling, grading, construction, compensation etc.
  - 3. <u>Drainage and/or utility</u> locations identifying all proposed conditions including, grading, drainage and utilities structures.
  - 4. Soil erosion and sedimentation control plan.
  - 5. Detail sheets
  - 6. Other plans if applicable to include but not limited to the following:
    - i. title sheet,
    - ii. construction plans to include, sequencing, phasing, temporary staging areas, material storage piles, access roads, storm water BMPS, blasting, wood chipping or rock crushing operations, etc.
    - iii. plan and profiles
    - iv. landscape plan to include genus/species of proposed plants
    - v. pre and post site watershed maps,
    - vi. local watershed map identifying all pre and post discharges from the site and the wetlands and watercourses to which discharges are ultimately delivered
    - vii.subdivision map
- j. Engineering or other reports as required by the Agency,
- k. Authorization for the commissioners and agents of the Commission to inspect the property, at reasonable times, both before and after a final decision has been issued.
- 1. Any other information the Agency deems necessary to the understanding of the activity proposed.
- m. Submission of the appropriate filing fee based on the fee schedule established in section 19 of these Regulations.
- n. A copy of the tax map showing existing land owners for all parcels included in the application. List of names and mailing addresses of adjacent landowners,
- o. A reporting form shall be completed during the application process which provides the Commissioner of the Department of Environmental Protection with information necessary to properly monitor the inventory of State wetlands. The Agency shall be responsible for the

remaining information and any corrections on the form and for filing it in accordance with section 22a-39-14 of the Inland Wetlands and Watercourses Regulations of the Department of Environmental Protection.

- 7.5 If the proposed activity involves a significant activity as determined by the Agency and defined in section 2.1.qq of these regulations, the following information is also required by the Agency.
  - a. All items listed and described in Section 7.4.
  - b. Plans <u>shall</u> meet the accuracy of an A-2 survey and be drawn, signed and sealed by a licensed surveyor or professional engineer/surveyor.
  - Engineering reports and analyses, are to include calculations, graphic hydrographs, and drawings
    which are necessary to fully describe the drainage or hydraulic modifications to wetlands and/or
    watercourses
  - d. Wetlands shall be delineated and flagged in the field by a qualified soil scientist and be located and incorporated onto the plans by a licensed surveyor. Soils mapped are to be consistent with the categories established by the National Cooperative Soil Survey of the U.S. Natural Resource Conservation Service. An original soils report describing the investigation and signed by the soil scientist is required.
  - e. Description of the ecological communities and functions of the wetlands or watercourses involved with the application and the effects of the proposed regulated activities on these communities and wetland functions;
  - f. Description of how the applicant will change, diminish or enhance the ecological communities and functions of the wetlands or watercourses involved in the application, and the alternatives considered, and a description of why each alternative considered was deemed neither feasible nor prudent;
  - g. Analysis of chemical or physical characteristics of any fill material;
  - h. Proposed compensation which mitigates impacts of the proposed activity. Such measures may include, but are not limited to, plans or actions which avoid negative impacts, destruction or diminution of wetlands or watercourses including but not limited to their functions, physical characteristics, vegetation, recreational uses, natural drainage patterns, water quality, and natural habitats. Also, which prevents flooding, degradation of water quality, erosion and sedimentation and obstruction of drainage, or which otherwise safeguard water resources.
  - i. Any environmental assessments performed on the site including but not limited to Phase I, II, and/or III.
  - j. Demonstration that the release rate of storm water runoff of the developed site shall not exceed the release rate and volume of the undeveloped site for all intensities and durations of rainfall up to a 100yr storm, essentially maintaining pre and post development hydrographs or demonstrate why this is not feasible or prudent.
  - k. Demonstration that the project has been designed at a minimum in accordance with guidance and recommendations set forth in the 2002 Connecticut DEP Soil Erosion and Sediment Control Manual (as updated) and the 2004 Stormwater Quality Manual (as updated), with particular attention to Chapter 7 applying the RCV recommendations to all sites or demonstrate why this is not feasible or prudent. Note: Treatment of the 1<sup>st</sup> flush (1 inch) is to be by retention and infiltration on site. Removal of fine sediments as well as larger sediments is to be considered.
- 7.6 If the proposed activity involves filling a regulated area then the following will be required:
  - a. All fill or wetland or watercourse disturbance greater than 750 square feet will require compensation. Since it is not possible to replace a mature functioning wetland or watercourse with

a created habitat, wetland or watercourse creation will be at a ratio of 2:1 in area. The Commission may reduce the ratio on a case by case basis, but cannot reduce the compensation to a ratio below 1:1 in area. Compensation measures should be considered in the following order of priority: restore, enhance and create productive wetlands or watercourse resources.

- b. The priorities of location of wetland or watercourse compensation shall be in the following order:
  - 1. Onsite
  - 2. Within the same sub-watershed
- c. The priorities of wetland creation and preservation shall be considered in the following order:
  - 1. Like habitat
  - 2. A wetland habitat of different environmental function from the impacted area.
- d. The compensation activities will require compliance with Section 11.12.

If a wetland is created, enhanced or restored as part of a compensation for regulated activity, the new wetland area will become the new boundary of the regulated area.

#### 7.7 The applicant shall certify whether:

- c. Any portion of the property on which the regulated activity is proposed is located within 500 feet of the boundary of an adjoining municipality;
- d. Traffic attributable to the completed project on the site will use streets within the adjoining municipality to enter or exit the site;
- e. Sewer or water drainage from the-project site will flow through and impact the sewage or drainage system within the adjoining municipality;
- f. Water run-off from the improved site will impact streets or other municipal or private property within the adjoining municipality.
- 7.8 Twelve (12) copies of the completed application form, narrative and soil scientist report, 3 full sets of maps / plans, 11 legible reduced size map/ plans, and application fee shall be submitted to comprise a complete application, or as is otherwise directed, in writing, by the Inland Wetlands Agency.
- 7.9 Any request to renew (extend the expiration date of) a previously issued permit, shall be filed with the Agency prior to a regular meeting which is scheduled prior to the expiration date for the permit in accordance with this subsection Section 11.8 of these regulations and section 22a-42a(d)(2) of the Connecticut General Statutes, provided:
  - a. The request shall state the reason why the authorized activities were not initiated or completed within the time specified in the permit;
  - b The request shall describe any changes in facts or circumstances involved with or affecting the wetlands or watercourses on the property for which the permit was issued.
  - c. The request shall describe the extent of work completed at the time of filing, and the schedule for completing the activities authorized in the permit.
  - d A permit shall be renewed upon request provided it meets the criteria set forth in Section 11.8 of these regulations and section 22a-42a(d)(2) of the Connecticut General Statutes
- 7.10 A copy of the "as built" site conditions may be required to be submitted to the Agency prior to issuance of the Certificate of Occupancy or upon completion of the project if no C.O. is required. The "as built" must include, but is not limited to, the following:
  - a. The location of the wetlands and watercourses

- b. Any Conservation Deed Restriction / Easements / Rights of Ways
- c. All foundations, driveways, and impervious surfaces
- d. All property boundaries.

As built may be required in the form of a digital file in a format specified by the Agency unless deemed unnecessary by the Agency.

#### **SECTION 8**

#### APPLICATION PROCEDURES

- 8.1.All applications, requests, or appeals shall be submitted to with the Inland Wetlands Agency of the Town of Branford.
- 8.2. In the case of any application where any portion of the wetland or watercourse on which the regulated activity is proposed is located within 500 feet of the boundary of Guilford, East Haven or North Branford, the applicant shall give written notice of the proposed activity, certified mail return receipt requested, to the affected adjacent municipal wetlands agency on the same day of filing an inland wetlands permit application with the Branford Inland Wetlands Agency. Documentation of such notice shall be provided to the Branford Inland Wetlands Agency, in accordance with section 22a-42c of the Connecticut General Statutes, as amended.
- 8.3. The Agency shall, in accordance with Connecticut General Statutes sections 8-7d(f)), notify the clerk of any adjoining municipality of the pendency of any application, petition, appeal, request, or plan concerning any project on any site in which:
  - a. any portion of the property affected by a decision of the agency is within five hundred feet of the boundary of the adjoining municipality.
  - b. a significant portion of the traffic to the completed project on the site will use streets within the adjoining municipality to enter or exit the site;
  - c. a significant portion of the sewer or water drainage from the project on the site will flow through and significantly impact the drainage or sewerage system within the adjoining municipality; or
  - d. water runoff from the improved site will impact streets or other municipal or private property within the adjoining municipality.

Such notice shall be made by certified mail, return receipt requested, and shall be mailed within seven days of the date of receipt of the application, petition, appeal, request or plan.

- 8.4. The date of receipt of a petition, application, request, or appeal shall be the day of the next regularly scheduled meeting of the agency, immediately following the day of submission to such agency or its agent of such petition, application, request or appeal or thirty five (35) days after such submission, whichever is sooner.
- 8.5. When an application is filed to conduct or cause to be conducted a regulated activity upon an inland wetland or watercourse, any portion of which is within the watershed of a water company as defined in section 25-32a of the Connecticut General Statutes, as amended, the applicant shall provide written notice of the application to the water company and the Commissioner of Public Health in a format prescribed by said commissioner, provided such water company or said commissioner has filed a map showing the boundaries of the watershed on the land records of the municipality in which the

application is made and with the Inland Wetlands Agency of such municipality. Such notice shall be made by certified mail, return receipt requested, and shall be mailed not later than seven days after the date of the application. The water company and the Commissioner of Public Health, through a representative, may appear and be heard at any hearing on the application. Documentation of such notice shall be provided to the Agency.

- 8.6. If a public hearing is to be held on any application for a permit, all substantive documentary evidence as determined by the agency in support of the application shall be filed with the Agency and be available for public inspection no less than five (5) business days prior to the day of the hearing or any reconvening thereof. If no public hearing is required, the agency requests that documents be submitted for review three days before the meeting.
- 8.7. All applications shall be open for public inspection.
- 8.8. Incomplete applications may be denied. In the case of an incomplete application, the Agency shall state the information that is needed to complete the application.
- 8.9 The Commission may determine that plan revisions done during the application process have altered the proposed project so that it constitutes a "new application" if the revision(s) have:
  - a. significantly altered the regulated activities proposed or potential impacts to the wetlands/watercourses, or
  - b. sufficiently altered the engineering design so that a new complete peer review must be performed rather than a simple update of the original review, or
  - c. revisions have been submitted at a time so late in the process that insufficient time is available for review by the commissioners and/or public, or
  - d. the quantity of revisions have required repeated peer reviews leaving insufficient funds (submitted per Section 19.5d.) available for additional peer review of the revisions.

If the Commission determines that a new application for permit must be submitted per this section, the original application may be withdrawn or will be denied, and a new application must be submitted.

#### SECTION 9

#### **PUBLIC HEARINGS**

9.1. The Inland Wetlands Agency shall not hold a public hearing on an application unless the inland wetlands agency determines that the proposed activity may have a significant impact on wetlands or watercourses, a petition signed by at least twenty-five persons who are eighteen years of age or older and who reside in the municipality in which the regulated activity is proposed, requesting a hearing is filed with the agency not later than fourteen days after the date of receipt of such application, or the agency finds that a public hearing regarding such application would be in the public interest. The agency may issue a permit without a public hearing provided no petition provided for in this section is filed with the agency on or before the fourteenth day after the date of receipt of the application. Such hearing shall be held no later than sixty-five days after the receipt of such application. All applications and maps and documents relating thereto shall be open for public inspection. At such hearing any person or persons may appear and be heard and may be represented by agent or by attorney.

- 9.2 Notice of the public hearing shall be published at least twice at intervals of not less than two days, the first not more than fifteen days and not fewer than ten days, and the last not less than two days before the date set for the hearing in a newspaper having a general circulation in each town where the affected wetland or watercourse is located.
- 9.3 Notice of the public hearing shall be mailed by the applicant to the owner(s) of record of abutting land no less than ten (10) days prior to the day of the hearing. Evidence of such mailing, in the form of United States Post Office certificates of mailing, shall be submitted to the Agency prior to the hearing date.
- 9.4 A sign shall be posted on the subject land which states the date, time, and place of the public hearing. Such sign will be provided by the applicant and shall be visible and legible to passerbys on the principle street on which the property is located. Such sign shall indicate the general nature of the proposed activity for which a permit is being sought. The sign shall be posted no less than ten (10) days prior to the public hearing. The sign shall be removed within 2 days of closing of the public hearing.
- 9.5 In the case of any application which is subject to the notification provisions of section 8.3 of these regulations, a public hearing shall not be conducted until the clerk of the adjoining municipality(ies) has received notice of the pending application. Proof of such notification shall be entered into the hearing record.

#### CONSIDERATIONS FOR DECISION

- 10.1 The Agency may consider the following in making its decision on an application:
  - a. The application and its supporting documentation;
  - b. Public comments at a regular meeting, as well as evidence and testimony from a public hearing;
  - c. Reports from other agencies and commissions including, but not limited to, the Town of Branford:
    - 1. Conservation Commission
    - 2. Planning and Zoning Commission
    - 3. Town Engineer
    - 4. Building Official
    - 5. East Shore District Health Department.
  - d. Comments on an application from the New Haven County Soil and Water Conservation District, the South Central Regional Planning Agency or other regional organizations; agencies in adjacent municipalities which may be affected by the proposed activity, or other technical agencies or organizations which may undertake additional studies or investigations;
  - e. Non-receipt of comments from agencies and commissions listed in subsection 10.1c and d above within the prescribed time shall neither delay nor prejudice the decision of the Commission.

#### 10.2 Criteria for Decision:

In carrying out the purposes and policies of sections 22a-36 to 22a-45, inclusive of the Connecticut General Statues, as amended, including matters related to regulating, licensing and enforcing the

provisions thereof, the Agency shall take into consideration all the relevant facts and circumstances, including, but not limited to:

- a. the environmental impact of the proposed regulated activity on wetlands or watercourses;
- b. the applicant's purpose for, and any feasible and prudent alternatives to, the proposed regulated activity which alternatives would cause less or no environmental impacts to wetlands or watercourses;
- c. the relationship between the short-term and long term impacts of the proposed regulated activity on wetlands or watercourses and the maintenance and enhancement of long-term productivity of such wetlands or watercourses;
- d. irreversible and irretrievable loss of wetland or watercourse resources which would be caused by the proposed regulated activity, including the extent to which such activity would foreclose the future ability to protect, enhance or restore such resources, and any mitigation measures which may be considered as a condition of issuing a permit for such activity including, but not limited to, measures to (1) prevent or minimize pollution or other environmental damage, (2) maintain or enhance existing environmental quality, or (3) in the following order of priority: restore, enhance, and create productive wetland or watercourse resources;
- e. the character and degree of injury to, or interference with, safety, health, or the reasonable use of property which is caused or threatened by the proposed regulated activity; and
- f. impacts of the proposed regulated activity on wetlands or watercourses outside the area for which the activity is proposed and future activities associated with or reasonably related to, the proposed regulated activity which are made inevitable by the proposed regulated activity and which are likely to have an impact on wetlands or watercourses.
- 10.3 In the case of an application which received a public hearing pursuant to a finding by the Agency that the proposed activity may have a significant impact on wetlands or watercourses, a permit shall not be issued unless the Agency finds on the basis of the record that a feasible and prudent alternative to the proposed activity does not exist. In making this finding, the Agency shall consider the facts and circumstances set forth in subsection 10.2 of this section. This finding and the reasons therefore shall be stated on the record in writing.
- 10.4 In the case of an application which is denied on the basis of a finding that there may be feasible and prudent alternatives to the proposed regulated activity which have less adverse impact on the wetlands or watercourses, the Agency shall propose on the record in writing the types of alternatives which the applicant may investigate provided this subsection shall not be construed to shift the burden from the applicant to prove that he is entitled to the permit or to present alternatives to the proposed regulated activity.
- 10.5 For purposes of this section, (1) "wetlands or watercourses", includes aquatic, plant or animal life and habitats in wetlands and watercourses, and (2) "habitats" means areas or environments in which an organism of biological population normally lives or occurs.
- 10.6 A municipal inland wetlands agency shall not deny or condition an application for a regulated activity in an area outside of wetlands and watercourses on the basis of an impact or effect on aquatic, plant, or animal life unless such activity will likely impact or affect the physical characteristics of such wetlands or watercourses.
- 10.7 In reaching its decision on any application after a public hearing, the Commission shall base its decision on the record of that hearing. Documentary evidence or other material not in the hearing

record shall not be considered by the Commission in its decision. However, the Commission is not precluded from seeking advice from its own experts on information already in the record of the public hearing. A conclusion that a feasible and prudent alternative does not exist does not create a presumption that a permit should be issued. The applicant has the burden of demonstrating that his application is consistent with the purposes and policies of these regulations and sections 22a-36 to 22a-45, inclusive, of the Connecticut General Statutes.

#### SECTION 11

#### **DECISION PROCESS AND PERMIT**

- 11.1 The Agency may grant the application as filed; grant it with such terms, conditions, limitations or modifications necessary to carry out the purposes of the Inland Wetlands and Watercourses Act, or deny it.
- 11.2 No later than sixty-five (65) days after receipt of an application, the Agency may hold a public hearing on such application. At such hearing any person or persons may be heard and may be represented by agent or attorney. The hearing shall be completed within thirty-five days of its commencement. Action shall be taken on applications within thirty -five (35) days after completion of a public hearing. In the absence of a public hearing, action shall be taken on applications within sixty-five days from the date of receipt of the application. The applicant may consent to one or more extensions of the periods specified in this subdivision, provided the total extension of all such periods shall not be for longer than sixty-five (65) days, or may withdraw the application. The failure of the agency to act within any time period specified in this subdivision, or any extension thereof, shall not be deemed to constitute approval of the application. An application deemed incomplete by the Agency shall be withdrawn by the applicant or denied by the Agency.
- 11.3 The Commission shall state upon its record the reasons and bases for its decision and, in the case of any public hearing, such decision shall be based fully on the record of such hearing and shall be in writing, and shall incorporate a statement relative to the consideration of feasible and prudent alternatives.
- 11.4 No activity, including, but not limited to, blasting, clearing of vegetation, materials processing, storage of rock, soil, and similar materials, installation of temporary sediment basins, and/or altered phasing or construction sequence other than what was expressly presented on the plans and documents submitted as part of the application and approved by the Agency, is permitted without additional review by the Agency. If it is determined that these activities are regulated activities then a new application may be required for such activities.
- 11.5 The Commission shall notify the applicant and any named parties to the proceeding of its decision within fifteen (15) days of the date of the decision by certified mail, return receipt requested, and the Commission shall cause notice of its order of the issuance or denial of a permit to be published in a newspaper having general circulation in the town wherein the inland wetland or watercourse lies. In any case in which such notice is not published within fifteen days of the date of the decision of the Agency, the applicant may provide for the publication of such notice within ten days thereafter.
- 11.6 If an activity authorized by the Inland Wetlands permit also involves an activity or project which requires zoning or subdivision approval, a special zoning permit, variance or special exception, a

copy of the decision and/or report on the application shall be filed by the Inland Wetland Agency with the Town of Branford Planning and Zoning Commission within fifteen days of the date of the decision of the Agency.

- 11.7 If the Commission denies a permit, the application shall not be resubmitted unless the proposal is modified in such a fashion that substantially changes the impacts which resulted in a denial. Such submittal shall take the form of a new application.
- 11.8 Any permit issued by the Agency for the development of land for which an approval is required under section 8-3, 8-25, or 8-26 of the Connecticut General Statutes, as amended, shall be valid for five years provided the Agency may establish a specific time period within which any regulated activity shall be conducted. Any permit issued by the Agency for any other activity shall be valid for not less than two years and not more than five years. Any such permit shall be renewed upon request of the permit holder unless the agency finds that there has been a substantial change in circumstances which requires a new permit application or an enforcement action has been undertaken with regard to the regulated activity for which the permit was issued provided no permit may be valid for more than ten years. Request for renewal shall be submitted in writing to the Agency, prior to a regular meeting that is scheduled before expiration of the permit per Section 7.9.
- 11.9 Permits transfer with property ownership. Upon property transfer, notification of the transfer is requested by the Agency.
- 11.10 If a bond or insurance is required in accordance with section 13 of these regulations, no permit shall be issued until such bond or insurance is provided.
- 11.11 General provisions in the issuance of all permits:
  - a. If the Commission relies in whole or in part on information provided by the applicant, and if such information subsequently proves to be false, deceptive, incomplete or inaccurate, the permit may be modified, suspended or revoked;
  - b. All permits issued by the Commission are subject to and do not derogate any present or future rights or powers of the Commission or the Town of Branford, and convey no rights in real estate or material nor any exclusive privileges, and are further subject to any and all public and private rights and to any federal, state, and municipal laws or regulations pertinent to the property or activity;
  - c. If the activity authorized by the inland wetlands permit also involves an activity or a project which requires zoning or subdivision approval, special permit, variance or special exception, no work pursuant to the wetlands permit is authorized until such approval is obtained;
  - d. The permittee shall take such necessary steps consistent with the terms and conditions of the permit to control storm water discharges and to prevent erosion and sedimentation and to otherwise prevent pollution of wetlands and watercourses.
- 11.12 If compensation is proposed or required as a condition of approval, a management plan is required that must include, but is not limited to, the following criteria:
  - a. A bond in accordance with section 13 shall be posted for a period of no less than 5 years;
  - b. Report intervals of 6 month, 1 year and thereafter annually for a period of no less than five years must be submitted by a qualified ecologist or wetland specialist documenting an 85% or better survival rate of planted wetland vegetation;

- c. Monitoring and control of invasive species;
- d. Approved erosion and sedimentation control measures;
- e. Or any other activity as specified in management practices as defined in section 2.1c of these regulations.

#### ACTION BY DULY AUTHORIZED AGENT

- 12.1 The Agency may delegate to its duly authorized agent the authority to approve or extend an activity that is not located in a wetland or watercourse when such agent finds that the conduct of such activity would result in no greater than minimal impact on any wetlands or watercourses provided such agent has completed the comprehensive training program developed by the Commissioner of Environmental Protection pursuant to section 22a-39 of the Connecticut General Statutes, as amended. Requests for such approval shall be made on a form provided by the Agency and shall contain the information listed under Section 7.4 of these regulations and any other information the Agency may reasonably require. Notwithstanding the provisions for receipt and processing of applications prescribed in Sections 8, 10 and 11 of these regulations, such agent may approve or extend such an activity at any time.
- 12.2 Any person receiving such approval from such agent shall, within ten days of the date of such approval, publish, at the applicant's expense, notice of the approval in a newspaper having a general circulation in the town wherein the activity is located or will have an effect. Any person may appeal such decision of such agent to the Agency within fifteen days after the publication date of the notice and the Agency shall consider such appeal at its next regularly scheduled meeting provided such meeting is no earlier than three business days after receipt by such Agency or its agent of such appeal. Any person may appear and be heard at the meeting held by the Agency to consider the subject appeal. The Agency shall, at its discretion, sustain, alter, or reject the decision of its agent or require an application for a permit in accordance with Section 7 of these regulations.

#### **SECTION 13**

#### BOND AND INSURANCE

- 13.1 Upon approval of the application and prior to commencement of approved activities, the applicant may, at the discretion of the Agency, be required to file a bond in an amount approved by the Commission or its designated agent. The bond is to be in the form of cash, check, or a certified check payable to the Town of Branford. Such funds will be deposited into an escrow sub account. Unused funds will be returned upon completion of the work for which the bond was submitted. An alternative type of bond may be submitted only with the express permission of the Agency.
- 13.2 The bond or surety shall be conditioned on compliance with all provisions of these regulations and the terms, conditions and limitations established in the permit.

#### **ENFORCEMENT**

- 14.1 The Commission may appoint an agent or agents to act on its behalf with the authority to inspect property, except a private residence, to issue notices of possible violation or cease and correct orders, and to carry out other actions or investigations necessary for the enforcement of these regulations.
- 14.2 The Commission or its designated agent may make regular inspections, at reasonable hours, of all regulated activities for which permits have been issued under these regulations.
- 14.3 If the Commission or its designated agent finds that any person is conducting or maintaining any activity, facility or condition which may be in violation of the Inland Wetlands and Watercourses Act or these regulations, the Commission or its duly authorized agent may:
  - a. issue a written Cease and Correct order by certified mail, return receipt requested, or by personal service, to such person conducting such activity or maintaining such facility or condition to immediately cease such activity or to correct such facility or condition. Within ten (10) calendar days of the issuance of such order the Commission shall hold a hearing to provide the person an opportunity to be heard and show cause why the order should not remain in effect. The Commission shall consider the facts presented at the hearing and within ten days of the completion of the hearing notify the person by certified mail, return receipt requested, that the original order remains in effect, that a revised order is in effect, or that the order has been withdrawn. The Commission shall publish notice of its decision in a newspaper having general circulation in the municipality if such Cease and Correct Order coincides with actions taken by the commission under Section 14.3.b. The original order shall be effective upon issuance and shall remain in effect until the Commission affirms, revises or withdraws the order. The issuance of an order pursuant to this section shall not delay or bar an action pursuant to section 22a-44(b) of the General Statutes of Connecticut, as amended.
  - b. suspend or revoke a permit if it finds that the Permittee has not complied with the terms, conditions or limitations set forth in the permit or has exceeded the scope of the work as set forth in the application including application plans. Prior to revoking or suspending any permit, the Commission shall issue notice to the Permittee, personally or by certified mail, return receipt requested, setting forth the facts or conduct which warrants the intended action and the Commission shall hold a hearing to provide the Permittee an opportunity to show that he/she is in compliance with its permit and any and all requirements for retention of the permit. The Permittee shall be notified of the Commission's decision to suspend, revoke, or maintain a permit certified mail within fifteen (15) days of the date of its decision. The Commission shall publish notice of the suspension or revocation in a newspaper having general circulation in the municipality. In any case in which such notice is not published within such fifteen-day period, the applicant may provide for the publication of such notice within ten days thereafter.
  - c. issue a notice of apparent violation "Notice of Apparent Violation" to such person conducting such activity or maintaining such facility or condition, stating the nature of the apparent violation, the jurisdiction of the Agency, and prescribing the necessary action and steps to correct the possible violation including, without limitation, halting work in wetlands or watercourses. The Agency may request that the individual appear at the next regularly scheduled meeting of the Agency to discuss the activity, and/or provide a written reply to the notice or file a proper application for the necessary permit. Failure to carry out the action(s) directed by the Agency

- may result in issuance of a Cease and Correct order provided in subsection 14.3a of these regulations or other enforcement proceedings as provided by law.
- d. file a Certificate of Violation in the Land Records. After satisfactory resolution of the violation the Agency shall file a release and remove the notice of the Certificate of Violation.
- 14.4 Any person who violates any provision of the Inland Wetlands and Watercourses Act may be liable for the cost of restoration of the affected wetland or watercourse to its condition, insofar as it is possible, prior to such violation. Any one who conducts regulated activites without a permit may be subject to enforcement action and/or fines and/or fees per Section 19.5 of these regulations, Section 196-8 of the Ordinances of the Town of Branford and/or Section 22a-44 of the Connecticut General Statutes amended. Fines of up to \$1000 per day may be levied against such violator.
- 14.5 The Permittee shall immediately inform the Agency's staff of problems involving sedimentation, erosion, downstream siltation, or any other adverse impacts which develop in the course of or are caused by the work herein authorized.

#### **AMENDMENTS**

- 15.1 These Regulations and the Inland Wetlands and Watercourses Boundary Map of the Town of Branford may be, from time to time, amended, changed, or repealed, by majority vote of the inland wetlands agency, in the manner specified in section 22a-42a of the Connecticut General Statutes, as amended and after a public hearing in relation thereto is held by the inland wetlands agency, in accordance with the provisions of CGS 8-7d. A copy of such proposed regulation or boundary shall be filed in the office of the town clerk for public inspection at least ten days before such hearing. A copy of the notice and the proposed regulations or amendments thereto, except determinations of boundaries, shall be provided to the commissioner at least thirty-five days before such hearing.
- 15.2 Regulations or boundary changes shall become effective at such time as fixed by the inland wetlands agency, provided a copy of such regulation or wetland map ammendment shall be filed in the office of the Town Clerk.
- 15.3An application filed with the Agency which is in conformance with the applicable inland wetlands regulations as of the date of receipt of such application shall not be required thereafter to comply with any change in inland wetlands regulations, including changes to setbacks and upland review areas, taking effect after the date of receipt and any appeal from the decision of such Agency with respect to such application shall not be dismissed by the Superior Court on the grounds that such a change has taken effect on or after the date of such receipt. The provisions of this subsection shall not be construed to apply to: (1) the establishment, amendment or change of boundaries of inland wetlands or watercourses, or (2) to any change in regulations necessary to make such regulations consistent with the provisions of Chapter 440 of the Connecticut General Statutes, as amended, as of the date of such receipt.
- 15.4 Petitions requesting changes or amendments to the "Inland Wetlands and Watercourses Map, Branford Connecticut" shall be submitted with the application form to the Agency and contain at least the following information:
  - a. The applicant's name, address and telephone number;

- b. The owner's name (if not the applicant), address, telephone number, and a written consent to the proposed action set forth in the application;
- c. A description of the applicant's interest in the land;
- d. A description of the geographic location of the property involved in the petition including a description of the land in sufficient detail to allow identification of the disputed wetland or watercourse areas;
- e. Reason(s) for the requested action;
- f. The names and addresses of adjacent property owners; and
- g. A signed and dated report from the soil scientist describing the method of investigation, types of wetland and upland soils found and any sketch of approximate flag locations they may include. A survey signed and sealed by a licensed surveyor that shall include location of flags placed by a qualified soil scientist defining the boundaries of the regulated wetland soil types. The numbers assigned to the flags by the soil scientist are to be clearly identified and the survey must be signed by the soil scientist who located the wetland boundaries in the field. The survey must meet the accuracy standard of an A2 survey as established by the State of Connecticut Board of Registry for professional engineers and land surveyors.
- h. If the amended map is adopted, the Agency will require that the applicant file the approved map amendment on the land records and may require submission to the Agency of a digital copy in a format specified by the Agency.
- 15.5 Watercourses shall be delineated by a licensed soil scientist, geologist, ecologist, surveyor or other individual whose qualifications satisfy the Commission.
- 15.6 A public hearing shall be held on petitions to amend Regulations and theInland Wetlands and Watercourses Map. Notice of the hearing shall be published in a newspaper having general circulation in the in the municipality where the land that is the subject of the hearing is located at least twice at intervals of not less than two days, the first not more than 15-days, nor less than ten days, and the last not less than two days before the date set for the hearing. All materials including maps and documents relating to the petition shall be open for public inspection.
- 15.7 The Agency shall hold a public hearing on a petition to amend the regulations and the Inland Wetlands and Watercourses Map within sixty-five (65) days after receipt of such petition. The hearing shall be completed within thirty-five days (35) after commencement. The Agency shall act upon the changes requested in such petition within sixty-five (65) days after completion of such hearing. At such hearing, any person or persons may appear and be heard and may be represented by agent or attorney. The petitioner may consent to one or more extensions of any period specified in this subsection provided the total extension of all such periods shall not be for longer than sixty-five (65) days or may withdraw such petition. Failure of the agency to act within any time period specified in this subsection or any extension therof, shall not be deemed to constitute approval of the petition.
- 15.8 The Commission shall make its decision and state, in writing, the reasons why the change in the Inland Wetlands and Watercourses Map was made.

#### **APPEALS**

- 16.1 Appeal from actions of the Agency shall be made in accordance with the provisions of section 22a-43 of the Connecticut General Statutes, as amended.
- 16.2 Notice of such appeal shall be served upon the Commission and the Commissioner of Environmental Protection.

#### SECTION 17

#### CONFLICT AND SEVERANCE

- 17.1 If there is a conflict between the provisions of these regulations, the provision which imposes the most stringent standards for the use of wetlands and watercourses shall govern. The invalidity of any word, clause, sentence, section, part, subsection or provision of these regulations shall not affect the validity of any other part which can be given effect without such invalid part or parts.
- 17.2 If there is a conflict between any provision of these regulations and a provision of the Inland Wetlands and Watercourses Act, the provision of the Act shall govern.

#### **SECTION 18**

#### OTHER PERMITS

18.1 Nothing in these regulations shall obviate the requirements for the applicant to obtain any other assents, permits or licenses required by law or regulation of the Town of Branford, State of Connecticut and the Government of the United States, including any approval required by the Connecticut Department of Environmental Protection and the U.S. Army Corps of Engineers. Obtaining such assents, permits or licenses is the sole responsibility of the applicant.

#### SECTION 19

#### APPLICATION FEES

- 19.1 Method of payment. All fees required by these regulations shall be submitted to the Agency by certified check or money order, payable to the Town of Branford at the time the application is filed with the Agency or as otherwise specified in these regulations or by the commission.
- 19.2 No application shall be reviewed or approved by the Commission unless the correct application fee is paid in full, or unless a waiver, delayed payment schedule, or reduction has been granted by the Agency pursuant to subsection 19.7 of these regulations.
- 19.3 The application fee is not refundable.
- 19.4 Definitions, as used in this section:

- a. "Commercial" means property developed for industry, commerce, trade, recreation, or business or being developed to be occupied for such purposes, for profit or nonprofit.
- b. "Duplex" means a residential structure containing only 2 dwelling units individually sited on its own lot.
- c. "Dwelling Unit" means each single residential unit
- d. Multi-family residential development means 3 or more attached or unattached dwelling units sited on property owned in common
- e. "Other uses" means uses other than residential or commercial
- f. "Residential" means property developed for permanent housing or being developed to be occupied by permanent housing.
- 19.5 Fee schedule. Application fees shall be based on the following schedule:
  - a. Applications that involve regulated activities per Section 6:

1. A Single or Duplex Residential dwelling on a lot		
Activity other than new dwelling	\$75	
Plus:	fee from Schedule A	
OR		
New dwelling	\$200	
Plus:	fee from Schedule A	

OR

2. Commercial Development, Multi-Family, subdivisions, and other Residential uses not included in 1. above:

	Up to first 1/2 acre of land disturbance	\$350		
	Plus for each additional 1/2 acre through 5 acres	\$200 per each ½ acre		
	Plus for each 1/2 acre of disturbed land over 5 acres	\$300 per each ½ acre		
	Plus:	fee from Schedule A		
	OR			
,	Do minimus and body at 11 at	<b></b>		

3. De-minimus application as determined by Agency \$25

OR

4. Request for renewal of a permit (subsections 7.9,11.8) \$50

#### AND

- 5. Fees to be assessed in addition to fees above as they apply:
  - a) Public Hearing \$150
     In addition to base fee, assessed if a public hearing is scheduled and is to be paid prior to initial commencement of public hearing
  - b) Significant activity fee- In addition to base fee, assessed if the IWC determines that a significant activity is proposed

Residential – Single Lot \$250 Residential – Multifamily \$500

Subdivision under 5 lots	\$500
Subdivision 5 lots and above	\$1000
Commercial/Industrial	\$1000

<u>Schedule A.</u> For the purpose of calculating the permit application fee, the regulated area in schedule A is the total area of wetlands and watercourses upon which a regulated activity is proposed.

Sq.Ft Regulated Area	Fee/1000 Sq.Ft of total Regulated Area or fraction thereof
a. 750 or less	\$50
b. 751 to 10,000	\$40
c. 10,001 or more	\$60

#### b. Applications that do not involve regulated activities are subject to the following fee schedule

1. Subdivision / Re-subdivision Referral without regulated activity \$50

2. Jurisdictional Ruling

a)	Permitted Uses as of Right – (subsection 4.1)	\$50
b)	Non-regulated Uses - (subsection 4.2)	\$25

3. Regulation Amendment Petition \$200

4. Map Amendment Petitions (subsection 15.3) \$200 plus: For total length of wetlands and watercourses boundary subject to the proposed boundary change

Linear Ft Regulated Area	Fee per 100 Linear Ft of wetland boundary
500 or less	\$15
501 to 1000	\$10
1001 or more	\$5

- c. <u>Violations</u> Violations not rectified in a timely manner or as stipulated by the commission shall be assessed an extra \$50 per commission meeting discussion. Compliance shall not be attained until all fees and/or fines assessed have been submitted to the Town.
- d. <u>Extra Assessments</u>: In the event that additional expenses, including but not limited to, the hiring of outside consultants, experts, or legal advisors are incurred in processing of applications or for ensuring compliance the applicant, permittee, or violator an additional fee may be assessed to cover said costs. Said fees will be held until the application is completely processed, project has been completed, or compliance has been achieved, after which time any residual funds pertaining to this assessment are to be returned to the applicant, permittee, or violator.
- e. <u>DEP fee</u> All applications and violations require submission of a DEP reporting form and the current fee as designated by the State of Connecticut.
- f. No permit shall be issued unless all required fees have been submitted to the Town.

- 19.6 Exemption. Boards, commissions, councils and departments of the Town of Branford are exempt from all fee requirements.
- 19.7 Waiver. The applicant may petition the Commission to waive, reduce or allow delayed payment of the fee. Such petitions shall be in writing and shall state fully the facts and circumstances the Commission should consider in its determination under this subsection. The Commission may waive all or part of the application fee if the Commission determines that:
  - a. The activity applied for would clearly result in a substantial public benefit to the environment, or to the public health and safety, and that the applicant would be reasonably deterred from initiating the activity solely or primarily as a result of the amount of the application fee, or
  - b. The amount of the application fee is clearly excessive in relation to the cost to the Town for reviewing and processing the application. The Commission shall state upon its record the basis for all actions under this subsection.

#### PUBLIC RECORDS RETENTION

20.1 The Agency and the Town Clerk for the Town of Branford shall retain complete administrative records of the Agency actions and dispose of such records in accordance with the retention/disposition schedules set forth by the Connecticut State Library per Connecticut General Statutes Section 11-8.

#### **SECTION 21**

# **EFFECTIVE DATE OF REGULATIONS**

21.1 These regulations, including the Inland Wetlands and Watercourses Map, application forms, fee schedule, and amendments thereto, shall become effective upon filing in the Office of the Town Clerk and publication of a notice of such action in a newspaper having general circulation in the Town of Branford.

Appendix

# Inland Wetlands Agency

# TOWN HALL \* PO BOX 150 \* 1019 MAIN ST. \* BRANFORD, CT 06405 Inland Wetland Commissioners & Staff - Credentials & Experience

February 17, 2009

Daniel Shapiro - Chairman since July 1996, member since August 1995 - Duly Authorized Agent\*

UVM - Mechanical Engineering Yale - Electrical Engineering 18

Robert Valley - member since 1985

**BSEE 1950** UCONN Electrical Engineering Richard Orson - member since February 1997

Ph.D. 1989 Rutgers University, New Brunswick, NJ (Wetland Ecology)

M.A. 1982 Connecticut College, New London, CT (Botany)

B.A. 1978 Western New England College, Springfield, MA (Biology)

RELATED EXPERIENCE

1996 to Present - Principle, Orson Environmental Consulting, Branford, CT 1996 to Present - Adjunct Biology Professor, Quinnipiac College, Hamden, CT

1992 to 1996 -Director, Wetlands Ecology Division, Najarian Associates, Eatontown, NJ 1994 to 1995 -Adjunct Wetland Ecology Professor, Rutgers University, New Brunswick, NJ

Assistant Professor, Dept. of Geography and Environmental. Sciences, William Paterson College, Wayne, NJ. 1988 to 1992 -

John Rusatsky - member since January 1998

SCSU major earth science geography & planning

RELATED EXPERIENCE - Currently, 11 years - zoning enforcement officer - town of Stratford CT

wetlands enforcement officer and asst. town planner- 6 years town of Cheshire, CT, ZEO 3 years town of Hamden, CT

independent consultant - planning and zoning ( land development )

Wesley Viezke - member since May 1999

M.D. 1963

Johns Hopkins University with honors - Certified American Board of Internal Medicine

B.A. 1959

Biology - DePauw University - Magna cum laude, biology, DePauw University,

Suzanne Botta - member since December 2001 - Duly Authorized Agent\*

Clark University - Psychology - Minor: Government - Concentrations: Ethics and Public Policy - Environmental Policy B.A. 1999 CERTIFICATIONS - Reg IV -Wetland Delineation Certification (Interdisciplinary: Army Corps of Engineers/Natural Resources Conservation

Service) - Connecticut Certified Teacher, General Science

Master Wildlife Conservationist Certification (CT Department of Environmental Protection)

RELATED EXPERIENCE - Community Organizer, Massachusettes Community Water Watch (AmeriCorps): Organized colleges students and community members to develop, implement, and run Environmental Education Programs in public schools. Water Quality Monitoring (for CSO's w/ the city DPW for Federal Phase I). CoFounder and CoChair: Branford River, Water Quality Monitoring teams.

Rick Ross - member since 2004-Duly Authorized Agent\*

Boston College Carroll School of Management

Managing Director, Westmount Management, Inc. - Licensed Real Estate Professional, State of CT - Qualified Commissioning Process Provider, University of Wisconsin School of Engineering

James K. Killelea - alternate member since June 2006

M.B.A. 1975 University of Connecticut

LL.B.1965

New York University School of Law

B.A.1962 Yale University Member Connecticut Bar since 1966

RELATED EXPERIENCE - Managed claims and lawsuits by companies against their insurers seeking reimbursement for damages arising from environmental pollution.

Steve Gangi - alternate member since June 2008

B.S. 1977 Northeaster University - chemistry

M.S.2003 Southern CT State University - Environmental Education

RELATED EXPERIENCE - Product Development Chemist & environmental compliance related to air, water and hazardous waste, conducted training in hazardous waste - 30 years Adjuct instructure in Environmental Science at Gibbs College, 2 years - member Branford River Project Water Quality Testing Team, 7 years

Kelly Starr - alternate member since January 2009

M.S. 2008 Southern Connecticut State University - Biology

B.A. 2001 University of Connecticut - Concentration Environmental Biology

A.S. 1998 Middlesex Community College

Staff:

Diana Ross - Inland Wetland Enforcement Officer - Since August 1998 - Duly Authorized Agent\*

M.S. 1996 University of New Haven - Environmental Science - GIS Certificate

B.S. 1978 Florida Institute of Technology - Biological Oceanography

Accreditation - NOFA Accredited Organic Land Care Professional - Connecticut Arborist - License S-5558 - January 2009 to present

Katy Bradley-Blanchette — Inland Wetlands Assistant - Since September 2007-Duly Authorized Agent\*

B.S. 2008 -Southern Connecticut State University-Environmental Science

\*Buly Authorized Agent - completed the "Comprehensive training program developed by the commissioner [of Environmental Protection, State of Connecticut] pursuant to section 22a -39"

#### Curriculum Vitae

#### RICHARD A. ORSON, Ph.D. OEC P.O. Box 921 Branford, CT 06405

#### EDUCATION

B.A.	1978	Western New England College, Springfield, MA (Biology)
M.A.	1982	Connecticut College, New London, CT (Botany)
Ph.D.	1989	Rutgers University, New Brunswick, NJ (Wetland Ecology)

#### PROFESSIONAL EXPERIENCE

Present -	Principal.	Orson	Environmental	Consulting.	Branford (	AL.

2004 to Present - Interim Habitat Restoration Director, Save The Sound, Norwalk, CT

1999 to Present - Adjunct Environmental Science Graduate Wetland Ecology, U of New Haven, CT

1996 to Present - Adjunct Biology Professor, Quinnipiac College, Hamden, CT

1992 to 1996 - Director, Wetlands Ecology Division, Najarian Associates, Eatontown, NJ
1994 to 1995 - Adjunct Wetland Ecology Professor, Rutgers University, New Brunswick, NJ

1988 to 1992 - Assistant Professor, Dept. of Geography and Environmental. Sciences, William

Paterson College, Wayne, NJ.

#### PROFESSIONAL AFFILIATIONS AND CERTIFICATIONS

Certified Senior Ecologist, Ecological Society of America; Professional Wetland Scientist, Society of Wetland Scientists; New England Estuarine Research Society; Estuarine Research Federation; Society of Ecological Restoration (former Board Member); Association of State Wetland Managers; Sigma Xi

# RECENT PROFESSIONAL ACTIVITIES

Commissioner Town of Branford Inland Wetland Agency; Technical Consultant, Branford Landtrust; Editor, New England Estuarine Research Society Newsletter; Reviewer for Estuarine Coastal and Shelf Science, Estuaries, Ecosystems Restoration and Creation Proceedings, Journal of Sedimentary Research; Journal of Geology. Chair, New England Sea Grant Regional Strategic Initiatives Workshop. Chair, ERF Symposium: Sea level rise and its impacts on estuaries.

#### SELECTED GRANTS (SINCE 1995)

Quinnipiac River Fund, New Haven (w/Anisfeld) - Wetland Loss in the Quinnipiac River Estuary, (2003). Marsh Ecology Research Program, (w/Saiers & Osgood) - Changes in peat structure following tidal marsh restoration: Implications for nutrient exchange (2001). CT.CTDEP/LISP (w/Osgood, Tait & Zajac) - Sybil Creek Restoration: Baseline data and preliminary habitat assessment prior to restoration (1998). NE Sea Grant (w/Warren & Niering) - Directions in tidal marsh research, New England Sea Grant Regional Strategic Initiatives Workshop (1997). CT Sea Grant (w/Warren & Niering) - The influences of accelerated sea level rise on tidal marsh development at Barn Island, Stonington, CT (1992 - 1995).

#### SELECTED PUBLICATIONS

Orson, R. A. and R.S. Warren. Manuscript in Preparation. Human impacts on the development of coastal wetlands of New England during the last few centuries.

Orson, R. A., R.S. Warren and W.A. Niering. In Review. Interpreting historic vegetation changes and peat formation in southern New England tidal salt marshes. Estuaries

Orson, R.A. 1999. A paleoecological assessment of Phragmites australis in New England tidal marshes: Changes in plant community structure during the last few millennia. Biological Invasions 1: 149-158

Orson, R.A., R.S. Warren and W.A. Niering. 1998. Interpreting the impacts of sea level rise on rates of vertical marsh accumulations in a southern New England tidal marsh. Estuarine, Coastal and Shelf Science 47: 419-429.

Orson, R.A., R.S. Warren, W.A. Niering and P. Van Patten. 1998. Research in New England Marsh-Estuarine Ecosystems: Directions and Priorities into the Next Millennium. Sea Grant

Publication CTSG-98-03, 62 pp.

Orson, R.A., W. Price and S. Weinstein. 1997. Soils, sediments and contamination, p123-135. In, D. Casagrande (ed.), Restoration of an Urban Salt Marsh: An Interdisciplinary Approach. Yale School of Forestry and Environmental Studies Bulletin Series #100, Yale University Press,

Orson, R.A., L. Brown, and P. Sharp. 1997. Ecological Context and vegetation restoration, p136-150. In, D. Casagrande (ed.), Restoration of an Urban Salt Marsh: An Interdisciplinary Approach. Yale School of Forestry and Environmental Studies Bulletin Series #100, Yale University Press, New Haven, CT.

Orson, R.A. 1996. Some applications of paleoecology to the management of tidal marshes.

. Estuaries 19: 238-246.

- Orson, R.A. 1995. Paleoecology and wetland creation and restoration. Wetland Journal 7:11,
- Orson, R.A. and Howes, B.L. 1992. Salt marsh development studies at Waquoit Bay, MA: Influence of geomorphology on long-term plant community structure. Estuarine, Coastal and Shelf Science 35: 453-471.
- Orson, R. A., R.L. Simpson and R.E. Good. 1992. A mechanism for the accumulation and retention of heavy metals in tidal freshwater marshes of the upper Delaware River estuary. Estuarine, Coastal and Shelf Sciences 34:171-186.
- Orson, R.A., R.L. Simpson and R.E. Good. 1992. Paleoecological development of a late Holocene tidal freshwater marsh of the upper Delaware River estuary. Estuaries 15:130-146.
- Orson, R.A., R.L. Simpson and R.E. Good. 1990. Rates of sediment accumulation in a tidal freshwater marsh. Journal of Sedimentary Petrology 60:859-869.
- Orson, R. A., R.S. Warren and W.A. Niering. 1987. Development of a New England river valley tidal marsh. Estuaries 10:20-27.
- Orson, R. A., W. Panageotou and S.P. Leatherman. 1985. Response of tidal salt marshes of the Atlantic and Gulf coasts of the United States to a rising sea level. Journal of Coastal Research 1:27-39.

SELECTED PRESENTATIONS AND REPORTS (SINCE 1996)

Orson, R.A. 2003. What historic development during the last 1000 years may mean to present day wetland losses. Invited Speaker, Long Island Sound Tidal Wetland Loss Workshop, Long Island Sound Study, Stony Brook, NY

Orson, R.A. 2003. Natural Resource Inventory for the Town of Branford. Report to the Town

of Branford Conservation Commission, 100 pp.

J. Saiers, D. Osgood<sup>1</sup>, R. Orson, T. Hoffman, K. Manafasi, and R. Sappe. 2002. Changes in peat structure following tidal marsh restoration: Implications for nutrient exchange. Society of Wetland Scientists, Albany, NY, May 2002.

Orson, R.A., D.T. Osgood, R.N. Zajac and J.F. Tait. 2000. Sybil Creek Restoration: Baseline data and habitat assessment prior to restoration. Report to the OLISP, CTDEP, Hartford, CT.

- Orson, R.A. 2000. A short history of Phragmites australis: Introduced, invasive or native and its implications on management. Invited Guest Speaker, Maryland DNR Workshop on Phragmites Management, Salisbury, MD, 4/00
- Orson, R.A. 2000. Short term sea level rise and marsh peat development in a southern New England tidal salt marsh. GSA 2000 Northeastern Meeting, New Brunswick, NJ, 3/00

Orson, R.A. 1998. Sea level rise and tidal marsh development: Interpreting the peat record.

Invited Speaker, UMD Seminar Series, Horn Point, MD.

Orson, R.A., R.S. Warren, W.A. Niering and M. van Patten (eds.). 1998. Research in New England marsh-estuarine ecosystems: Directions and priorities into the next millennium. Report to the Connecticut Sea Grant Office, UCONN, Groton, CT. 75 pages.

Orson, R. A. 1997. Sea Level Rise and the Estuarine Environment. Symposium Chair/Organizer, Estuarine Research Federation, Providence, RI, October 1997

Orson, R. A. 1996. The importance of plant community structure on form and function of created wetland systems. American Society of Civil Engineers North American Water and Environment Congress '96, Anaheim, CA, June 1996.

#### Resume

Wesley M. Vietzke, MD

Born Fort Defiance AZ January 1, 1938 Married Barbara Feroe April 2, 1966 Children: Gay Elizabeth June 12, 1968 Robert Paul February 18, 1970

Education: Valparaiso, IN public schools.

B.A. DePauw University, Greencastle, IN 1959 (highest honors)

M.D. The Johns Hopkins University, Baltimore, 1963 (highest honors)

Medical Training: Internship, Residency in Internal Medicine at Yale New Haven Hospital 1963-65, '68-69. Fellowship in Hematology Yale U. 68-69

Military Service: US Public Health Service Reserve Officer, assigned to National Institute of Health, National Cancer Institute. 1965-67

Honors: Phi Beta Kappa, Alpha Omega Alpha(honor medical society) elected Fellow American College of Physicians 1980

Work History: 1969-75, Assistant Professor of Medicine, Associate Dean, Uconn School of Medicine, Farmington, CT.

1975-1984 Physician, Yale U. Health Services. Assistant Clinical Professor of Medicine. Yale U.

1984-1990 Physician in Chief, Kaiser Permanente Hartford, Stamford

1991-93 Physician CHCP Branford.

1993-95 Physician CONNCare, Norwich CT.

1996-97 Physician Quinnipiac Med Services. North Haven

1998-2000 Physician Golan Health Services/Nursing home care

2001-present. Semi retired. Worked occasional Locum Tenens (Temporary assignments) across the country.

Resident Branford 1975-present. Past President Haycock Point Improvement Association

# SUZANNE BOTTA

# CURRICULUM VITAE

#### PROFESSIONAL EXPERIENCE ~

- Manage regulatory compliance with various municipal, state, and federal agencies, e.g. DPH, FEMA
- Administer homeowner association by-laws, rules, and regulations
- Write position statements
- Organize and implement water quality monitoring programs utilizing biological and chemical parameters
- Teach environmental science, including ecology and biology
- Provide initial assessment of stormwater, plumbing, and community well system complications

# OTHER RELATED EXPERIENCE ~

Town of Branford

# Inland Wetland Commissioner / Duly Authorized Agent Branford Inland Wetlands Commission

Nov. 2001 - Present

- - Review applications, site plans, planting plans, sediment and erosion control measures for compliance with Branford regulations, case-law, and CT General Statutes
- Perform site inspections for new applications, permits in progress, and violations
- Foster local organizations and the public's understanding of the commission's role, wetland issues, such as upland review areas, West Nile Virus and the process for obtaining permits

#### Branford River Project - Water Quality Monitoring Co-Founder

Spring 2002 - Present

Recruit, train and organize volunteers to test water quality in the Branford River monthly from June - Oct. Volunteers were trained to test water quality utilizing both chemical and biological parameters

#### **EDUCTION** ~

Bachelor of Arts Clark University, Worcester, MA

Sept. 2000

Major: Psychology Concentrations:

Environmental Policy

Ethics & Public Policy

# ADDITIONAL TRAINING & PROFESSIONAL WORKSHOPS ~

REG IV - Wetland Identification, Delineation & Classification - Federal 40-Hour Course, 2003

Minor: Government

- Rapid Bioassessment Protocols
- CT Association of Wetland Scientists, Annual Meetings/ Workshops
- Yale Short Course on River Process
- Public Health, Ground Water, and Water Wells: Small Water Systems, American Ground Water Trust
- Well Water Rehabilitation
- CT Association of Conservation and Inland Wetland Commissioners Annual Meetings
- Municipal Inland Wetland Trainings Segments: I; 2002, Segments II & II annually since 2002- CT DEP
- Master Wildlife Conservationist, Six-week CT Wildlife training, CT DEP
- Sediment & Erosion Control Measures, Southwest Conservation District
- Branford Vernal Pool Inventory report Author, Noble Proctor
- Rain Garden Landscaping

# Kelly Lynn Starr

P.O. Box 3052 Branford CT 06405 (860) 227-9841 Email: kellvstarr@hotmail.com

#### **EDUCATION**

Southern Connecticut State University Masters of Science in Biology, August of 2008 G.P.A 3.8 out of 4.0 University of Connecticut, Storrs, CT Bachelor of Arts in Biology, December of 2001 Concentration: Environmental Biology Middlesex Community College Associates of Science, May of 1998

Relevant Course Work and Laboratory Training

Coastal Ecosystem Management, Wetlands Biology and Conservation, Marine Invertebrates, Ichthyology, Marine Biology, Biology of Fish, Aquatic Entomology and Systematics, Oceanography, Plant Diversity, Ethnobotany, Zoology, Environmental Biology, Ecology, Methods of Ecology, Evolutionary Biology, Ornithology, Genetic Analysis, Microbiology, Parasitology, Animal Physiology and Neurobiology, Human Anatomy and Physiology

Thesis Project

Utilized a restoration technique to relocate adult sea lamprey above barrier dams to determine how habitat availability affected adult nesting success and ultimately juvenile habitat selection and growth.

Computer Skills:

Advanced skills with MS Office including Word, Excel, PowerPoint and Outlook Working experience with AutoCAD, FileMaker Pro database, Mathematica, Populas, S-plus, Vision

#### <u>Field Instrume</u>nt Use:

Photo Ionization Detectors (OVM Model 580B and 580S, Photovac Model 2020) Water Quality Meters: Dissolved Oxygen, Conductivity, Specific Conductance, Salinity, Redox Potential, pH and Temperature Turbidity Meter Submersible Pumps

<u>Training</u>

OSHA 40-Hour OSHA Health and Safety Operations of Hazardous Material Site 1910.120 (HAZWOPER) OSHA 8-Hour (HAZWOPER) Refresher Metro-North Railroad Safety Training

#### **EMPLOYMENT**

#### Environmental Compliance Services, Inc., Branford, CT Environmental Scientist "Acting Project Manager" August 2008 - Present

Responsible for managing all aspects of projects including:

- Field coordination, investigation and data collection utilizing CTDEP guidance documents
- Interfacing with clients including the CTDEP, Municipalities, private industry, and subcontractors
- Report preparation and timely submission to State and Federal Agencies including Phase II and Phase III subsurface investigation reports, routine groundwater monitoring reports, and Point of Entry Monitoring Reports
- Maintain project budgets and invoicing
- Mentoring and training Junior Staff
- Scheduling field activities, coordinating site access, equipment rentals and laboratory arrangements
- Maintaining field and equipment supplies and invoice approval
- Field responsibilities include subsurface investigations, groundwater monitoring, site inspections and oversight.

#### Field Technician II

# September 2007 - August 2008

#### October 2005 - May 2006

- Preformed water quality assessment and monitoring utilizing State and Federal regulations
- Coordinated with the Connecticut Department of Environmental Protection Remediation Division and the Connecticut Department of Public Health Laboratory regarding quarterly groundwater (potable) sampling activities and protocols, and corrective actions for a Superfund site
- Conducted subsurface investigations including sample location, analysis, depth, collection and classification of soil samples and monitoring well installation.
  - o Subsurface investigation to further delineate the extent and degree of contamination of an oil terminal, gas stations and manufacturing facilities.
- Provided field supervision of UST removals including soil screening and closure samples.
- Conducted Phase I Environmental Site Assessments and related tasks including site inspections, historical research of site properties and buildings, regulatory research and subsequent report preparation
- Prepared quarterly and semi-annual groundwater investigation reports utilizing the Remediation Standard Regulations (RSRs). Provided the project manager with timely information regarding RSR exceedances and significant environmental hazards
- Preparation of Environmental Condition Assessment Form (ECAF) for submission to the CT DEP
- · Surveying of monitoring well elevations and mapping of groundwater flows

Department of Environmental Protection, Marine Headquarters, Old Lyme, CT
Inland Fisheries Division "Diadromous Program"
Seasonal Resource Assistant
March 2007 - August 2007
May 2006 - November 2006
March 2004 - August 2004
March 2003 - August 2002

- Responsible for monitoring river herring runs throughout the state by observing populations at index stream sites, fishways and counters.
- Assisted in the construction and installation of fish counters and modifications to culverts to create passage upstream
- Reviewed fishway video from three hydroelectric facilities, and identified fish to species and maintained population numbers for weekly reports
- Assisted in setting up seasonal enclosurer in a stream with a large population of alewife to stock into streams with declining populations in an attempt to restore populations numbers
- Determined population dynamics with data gathered throughout the season
- Assisted in stocking sea-run brown trout fry and salmon fry in appropriate habitat
- Gained extensive knowledge of electrofishing principles
- Electrofished index sites to determine population and size structure for sea-run brown trout smolts and salmon smolts, and American eels, and stocking success for stocked sea-run brown trout and salmon
- Gathered data used to determine available habitat in stream sections for sea-run brown trout fry
- Collected population data for sea lamprey by surveying spawning habitat for nests
- Assisted in the installation and maintenance of eel fykes and eel passes, and collected population numbers in addition to collecting weight and length data
- Responsible for operations at the Rainbow Fishway, including monitoring the viewing window and maintained species population numbers
- Operated two fishway traps to capture salmon to be transported to the Richard Cronin National Salmon Station to be held for spawning
- Knowledge of fish marketing techniques, vaccination, spawning and gamete processing
- Removal of several invasive aquatic plant species (hydrilla, and water chestnut) in several river basins
- Data entry, general maintenance and repairs to fishways and disinfected stocking trucks

# Consulting Environmental Engineers, Inc., West Hartford, CT Staff Scientist September 2004 - May 2005

- Groundwater monitoring of aquifers using low-flow EPA Protocol and bailer techniques
- Responsible for surface water sampling, stormwater sampling, and residential potable water sampling
- Performed subsurface investigations and monitoring well installation (direct push technology and hollow stem auger and test pits) and logging subsurface material to assess the affect of historical land use of soil and groundwater
- Oversight of contaminated soil storage, sampling and removal using Remediation Standard Regulations and facility requirements
- Oversight of various Department of Transportation Roadway Construction Projects
- Audited Waste Transfer and Disposal Facilities for the Connecticut Department of Transportation
- Preparation of Quarterly, Semi-Annual and Annual Reports to Federal and State Regulatory Agencies
- Created Health and Safety Procedures (HASP) for projects

# University of Connecticut, Biotechnology Center, Storrs, CT DNA Core Facility

Laboratory Assistant

September 1999 - May 2001

Performed DNA Synthesis with two Beckman Oligo 1000M DNA Synthesizer

Assisted DNA Sequencing operations by setting up an automated ABI Prism 377XL DNA

Prepared sequencing samples

- Working knowledge of DNA synthesizer, sequencer, spectrophotometer, centrifuge and general laboratory equipment use
- In charge of customer contacts and record keeping

Responsible for monthly billing

Protein Peptide Facility Assistant

September 2001-December 2001

Responsible for the production and distribution of monthly billing, supervision of laboratory equipment use, and distribution of reagents to various laboratories

Fonicello's Garden Center, Guilford, CT Senior Associate August 1999 - December 2003

Trained and supervised new employees in plant identification and cultivation, while establishing and maintaining customer rapport

#### Diana L. Ross 634 Derby Milford Road Orange, CT 06477 January 2009

#### WORK EXPERIENCE:

Inland Wetland Enforcement Officer - Town of Branford CT

Aug. 1998 - Present

- · Administrator, analyst, wetland enforcement officer, and duly authorized agent for the Inland Wetland Agency
- Assist in the development of the town GIS implementation

Assistant Planner - temporary, part time position - Town of Greenwich CT

Aug.1997 - Aug.1998

- Review coastal administrative applications
- Research, gather information for creation of GIS maps and plot CAD maps for the Plan of Conservation and Development. Use AutoCAD14 to edit digitized Cad maps.

Internship - Connecticut DEP - Office of Long Island Sound Programs

Oct. 1996 - May 1997

- Surveyed a set of towns through interviews with town officials and study of town regulations from the 6217
   Management Area in Connecticut to gather information about regulations and practices which affect non point source pollution (NPS).
- Identified innovative regulations, practices and zoning overlays in particular towns which could be incorporated into
  other towns to prevent or mitigate NPS Pollution and
  suggested ways in which improvements could be made.

Laboratory Technician - Quality Control - Dexsil Corporation, Hamden CT

Sept. 1994-Oct. 1995

· Performed quality control procedures and adjustments on chemical environmental test kits

Laboratory Technician - Microbiology - U.S. Forestry Service, Hamden CT

Dec. 1992-Sept. 1994

- Collected, Cultured and performed research to identify species of Armillaria fungus
- Used PCAD to map species of Armillaria and host trees

Laboratory Assistant - Roebic Laboratories Inc., Orange CT

Nov. 1990-Dec. 1992

• Cultured and performed quality control procedures for bacterial products to be used for environmental applications Recording Secretary - Inland Wetland and Water Courses Commission Town of Orange July 1985-Sept. 1986

#### **EDUCATION:**

Masters - Environmental Science - August 1997
Professional Geographic Information Systems Certificate - December 1996
University of New Haven, West Haven, CT
Bachelor of Science Degree - Biological Oceanography - June 1978
Florida Institute of Technology, Melbourne, FL

#### ADDITONAL TRAINING AND CERTIFICATIONS:

Connecticut Arborist - License S-5558 - January 2009 to present NOFA Accredited Organic Land Care Professional - January 2008 to present Connecticut DEP training - Duly Authorized Wetland Agent

Yale Short Course on River Process

CT Association of Wetland Scientists, Annual Meetings/ Workshops

CT Association of Conservation and Inland Wetland Commissioners - Annual Meetings

#### MEMBERSHIPS:

 $\label{lem:connecticut} \mbox{Connecticut Association of Conservation and Inland Wetland Commissions, Board of Directors-New Haven County representative}$ 

Town of Orange Inland Wetland and Watercourses Commission member

Connecticut Association of Inland Wetland Agents - Treasurer

Town of Orange Conservation Commission - Past Member

Town of Orange Land Trust - Past member of Board of Directors

#### Steve Gangi

Qualifications and relevant experience:

BS Chemistry, 1979 MS Environmental Education, 2003

Masters program included coursework in Coastal Management, Energy, Solid Waste, GIS, Environmental Psychology, Hazardous Waste/First Responder, and Field Analysis.

30 years experience as industrial Product Development Chemist with concurrent responsibility for environmental compliance relating to air, water, and hazardous waste. Conducted company training for hazardous materials.

2 years experience as an Adjunct Instructor in Environmental Science at Gibbs College.

Member for 7 years, Branford River Project, water quality testing team.

# STEPHEN GANGI

76 WAVERLY PARK RD. • BRANFORD, CT 06405 PHONE 203-488-9421 • B-MAIL SGANG54@AOL.COM

#### EDUCATION

- 1972-1977 Northeastern Univ., Boston, MA; BS Degree in Chemistry
- n 1977-1980 Univ. of Connecticut, Storrs, CT; Graduate study in polymer science.
- 1999- 2003 Southern Conn. State Univ.; MS Degree in Environmental Education.

# PROFESSIONAL EXPERIENCE

1991-1996; 2005-pres Hicks and Otis Co., Norwalk, CT R&D Chemist, Chief Chemist

Development of plastic film coating and laminating adhesive systems. Materials included polyester, urethane, acrylic, and epoxy solvent and waterborne adhesives for color matched automotive exterior trim and graphic arts applications. Substrates used include polyester, fluoropolymer, PVC, acrylic, PE, PP, PU, and ABS films. Responsible for Hazardous Waste, Toxic Release reporting, compliance and employee training. Duties also include Quality Management, IMDS, and REACH reporting.

- 2005-2007.; Gibbs College, Norwalk, CT

  Adjunct Instructor Environmental Science

  Teaching overview course in Environmental Science to diverse groups of night students. Topics include social sciences as well as Chemistry, Physics and Biology examining a variety of environmental problems.
- 2002 2005; Derby Cellular Products, Derby, CT Chief Chemist/Environmental Compliance Mgr.

Compound and process development of solid and sponge rubber EPDM, Chloroprene, Nitrile/PVC, and silicone rubber extrusion products. Focus was on transportation, architectural, appliance, marine and air filtration sealing systems as well as coatings and adhesives for fabricated seals. Responsibility also included environmental compliance for the factory and product compliance to environmental regulations. Oversaw the resolution of DEP Waste Management and Water Management violations.

 1996 – 2002.; Longwood Engineered Products (formerly Eagle-Picher Rubber Molding Div.), Stratford, CT and Fairfield (Fairprene Div.), CT
 Plant Chemist

Technical service, product development for high speed compression molding of NBR, SBR, EPDM, ECO, and FKM polymers. Also coating, calendering and continuous curing of sheet stock and fabric reinforced rubber sheet materials. Applications included automotive fuel systems and potable water

sealing systems. Participated in ISO-9000, Lean Manufacturing and Continuous Improvement projects

1979-1991; CHR Industries (now St. Gobain Ind.), New Haven CT
 R&D Chemist

Product and process development of silicone rubber calendered and coated solid, sponge, coated fabric, and adhesive products for military and aerospace applications. Developed product lines of thermally conductive insulating materials, semi-conductive silicones, flame retardant aircraft fabrics, cable insulation materials and pressure-sensitive tapes. Process development included calendering, continuous vulcanization, dip coating, reverse-roll coating, and adhesive application. Also responsible for technical service, marketing literature development, and sales support. Participated in the implementation of MRP II inventory control system.

# PROFESSIONAL ASSOCIATIONS

Member, Connecticut Rubber Group 1980-pres., Board of Directors 2002-07, Co-Chair of Scholarship Committee 2004-pres.

Company representative to ASTM Committee D-09 on Electrical insulation, 1986-1991

# CIVIC ASSOCIATIONS AND OTHER INTERESTS

Member, Branford Inland Wetlands Commission, 2008-pres.

Music/Marching Instructor:

- 7th Regiment, Drum & Bugle Corps, New London CT, 2006-pres.
- Brien McMahon HS Marching Band, Norwalk, CT, 2007-pres.
- Naugatuck HS Marching Band, Naugatuck, CT, 1994-2001
- Branford HS Marching Band, 1998-99
- Brookfield HS Marching Band, Brookfield, CT, 2004-05

Branford River Project member, water quality testing, watershed management planning and education projects.

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